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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

APR 22 1997

Federal Communications Commission
Office of Secretary

In the Matter of)	
)	
Access Charge Reform)	CC Docket No. 96-262
)	
Price Cap Performance Review for Local Exchange Carriers)	CC Docket No. 94-1
)	
Transport Rate Structure and Pricing)	CC Docket No. 91-213
)	
Usage of the Public Switch Network by Information Service and Internet Access Providers)	CC Docket No. 96-263

REPLY COMMENTS OF
THE ALARM INDUSTRY COMMUNICATIONS COMMITTEE

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SUMMARY

The Alarm Industry Communications Committee (AICC), by its attorneys, respectfully submits these reply comments to the Notice of Inquiry concerning enhanced services.¹ AICC supports the FCC Staff's conclusions that alarm services do not contribute to the alleged network congestion that is the focus of this proceeding.² Calls to alarm company central stations are short, and alarm companies receive very few incoming calls per line per day. Additionally, calls to alarm companies end there. Unlike calls to Internet Service Providers (ISPs), calls to alarm companies are not passed through to other networks.

AICC therefore requests the Commission to distinguish between alarm services and Internet access services. Any policies and rules that are proposed to resolve any network congestion cause by Internet access services should not be imposed on alarm services. This request is consistent with the Congressional goal of supporting the vitality of the alarm industry as it provides public safety services via thousands of small businesses throughout the country.

¹ Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry (Access Charge Reform), CC Docket No. 96-262, FCC 96-488, released Dec. 24, 1996.

² FCC Office of Plans and Policy Working Paper Series, 29: Digital Tornado: The Internet and Telecommunications Policy, March 1997, at 61.

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¹ Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry (Access Charge Reform), CC Docket No. 96-262, FCC 96-488, released Dec. 24, 1996 [hereinafter NPRM, Third Report and Order, and NOI].

² FCC Office of Plans and Policy Working Paper Series, 29: Digital Tornado: The Internet and Telecommunications Policy, March 1997, at 61 [hereinafter OPP Internet Paper].

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These issues are discussed below.

I. INTEREST OF AICC

AICC is a subcommittee of the Central Station Alarm Association. Its members consist of ADT Security Systems, Inc.; Holmes Protection Group, Inc.; Honeywell Protection Services; L.T. Fiore, Inc.; National Burglar and Fire Alarm Association; Rollins Protective Services, Inc.; Security Industry Association; Security Network of America; Wells Fargo Alarm Services; and Westec Security, Inc. AICC membership represents a large majority of the alarm security services provided throughout the United States.

Alarm companies are enhanced service providers (ESPs) and therefore would be affected by any Commission proposals concerning the use of the public switched telephone network (PSTN) by ESPs.

II. THE OPP INTERNET PAPER RECOMMENDS THAT SWITCH CONGESTION REMEDIES SHOULD BE APPLIED TO ISPs, NOT ALARM COMPANIES

The OPP Internet Paper recommends that the Commission distinguish between alarm companies and Internet access providers. The FCC Staff states:

A distinction should . . . be made between the larger class of ESPs -- which include companies such as voice mail providers, alarm monitoring companies, credit card validation services, and internal corporate data networks -- and Internet or online service providers. Current FCC rules refer only to ESPs, but the arguments LECs [(local exchange carriers)] are now making about switch congestion are directed specifically at the small subset of ESPs that provide Internet access. The fact that Internet usage may be placing new demands on LEC networks is not necessarily a reason to impose usage charges on enhanced service companies other than ISPs. . . . If the Commission wishes to consider the LEC arguments about switch congestion, . . . the discussion should only apply to pricing of services for ISPs, not all ESPs.³

Similarly, Juno Online Services, L.P. (Juno) states:

If the Commission determines that certain ESPs should pay access charges, it must recognize that there are significant differences among ESP configurations and their use of local telephone networks. Characteristics that vary from ESP to ESP include average holding times of ESP subscribers, the frequency with which a subscriber dials into an ESP, the time of day when subscribers call an ESP, and the substitutability of an ESP service for traditional voice services. These differences must be considered when assessing the alleged need for access charges to recover LEC costs or providing network access to ESPs. In particular, those ESPs that generate network usage which is comparable to or less than that of typical

³ OPP Internet Paper at 61 (emphasis added).

business line users, such as Juno,⁴ should clearly not be subject to LEC access charges.

AICC agrees with these recommendations that the Commission distinguish among ESPs.

AICC therefore disagrees with the Internet Access Coalition's (IAC's) opposition to the disparate treatment of ESPs that provide different services.⁵ The IAC assumes that the Commission would distinguish among ESPs on the basis of whether a particular enhanced service receives long hold-time calls.⁶ AICC submits that regardless of any guidelines the Commission may adopt for distinguishing among ESPs, if the Commission were to propose rules to alleviate any network congestion, those rules should not be applied to alarm services which do not contribute to that congestion, as demonstrated below.

III. THE ALARM COMPANIES ARE NOT CONTRIBUTING TO SWITCH CONGESTION

In AICC's Reply Comments to the NPRM, AICC demonstrated that the alarm companies are not contributing to switch congestion for three reasons. First, incoming calls to alarm companies are short.

Calls made using the PSTN from burglar and fire alarms to alarm company central stations work as follows: A

⁴ Juno Comments at 4, 12-18; see also The Association of Online Professionals Comments at 4-5 (urging the Commission to differentiate among enhanced services).

⁵ IAC Comments at 57.

⁶ Id. at 59.

burglar or fire alarm dials the central station, sends data concerning the location and nature of the emergency, and hangs up. This process takes anywhere from approximately 8 seconds (for newer equipment) to 30 seconds (for older equipment).⁷

Second, due to the need to provide reliable service, the incoming lines process very few calls.

Central stations need to receive alarm information in order to ensure that the appropriate police, fire or other emergency personnel are dispatched to the customer's premises. A business experiencing a burglary, or a residence on fire, cannot afford to have its alarm system call the central station only to receive a busy signal. The call must go through.

Several standards therefore have been developed for determining the number of incoming lines at a central station based on the number of alarm systems served by that central station. For example, the National Fire Protection Association's Alarm Code requires two lines to support up to 500 alarm systems, and three lines to support up to 1,500 alarm systems.⁸ Underwriters Laboratories, Inc. has developed similar standards for the number of incoming lines at a central station based on the number of alarm systems served by that central station.⁹

Finally, the combination of short calls and a low number of calls per line per day renders very low usage for each line. Consider the following worst-case scenarios:

[A]ssume that: (a) a central station has three incoming lines and serves 1,500 alarm systems; (b) each alarm call takes 30 seconds; and (c) each alarm system activates five times per year. Then each line would

⁷ AICC Reply Comments at 8-9.

⁸ National Fire Protection Ass'n, National Fire Alarm Code 72-54 (1996) (enclosed as Exhibit 1).

⁹ AICC Reply Comments at 8.

answer an average of 7 calls per day,¹⁰ for a total average usage of 3.5 minutes per line per day. Even if some of these 1,500 systems were to run daily self-tests (which only a small percentage of alarm systems do), the usage still is low. For example, if 10% of the 1,500 systems performed daily self-tests, each line would answer an average of 57 calls per day,¹¹ for a total average usage of 28.5 minutes per line per day.¹²

In sum, the need for alarm companies to provide reliable service results in daily PSTN usage that can be measured in minutes, not hours.

By comparison, Pacific Telesis Group states that incoming lines to ISPs are busy for over 11 hours per day.¹³ CompuServe reports almost eight hours of use per line per day for incoming calls to its online service.¹⁴ Certainly, the alarm companies are not contributing to any congestion caused by Internet access providers.

The usage of the PSTN by alarm companies is, at most, more analogous to the usage of the PSTN by residential customers making voice calls. Pacific Telesis Group states that voice calls usually last 4 to 5 minutes, and result in residential

¹⁰ (1,500 systems x 5 calls per year / 365 days per year / 3 incoming lines).

¹¹ (((1,500 systems x 5 calls per year) + (150 systems doing daily self-tests x 365 days per year)) / 365 days per year / 3 incoming lines).

¹² AICC Reply Comments at 9.

¹³ Pacific Telesis Group Comments at 26.

¹⁴ Compuserve, Inc. and Prodigy Servs. Corp. NPRM Comments at 11 n.25.

lines being busy 22 minutes per day.¹⁵ This daily usage approximates the second worst-case scenario discussed above for alarm companies. If alarm systems do not perform self-tests, the alarm companies' lines likely would be busy substantially less than a residential voice line on a daily basis. Additionally, because the calls to alarm company central stations are shorter than voice calls, the likelihood that a LEC switch would experience call blockage is much less for LECs serving alarm companies than LECs processing voice calls.¹⁶

In sum, the usage of the PSTN for alarm services is magnitudes less than the usage for Internet services, and is likely to be less than the usage for voice services.

However, many commenters lump together ISPs with all ESPs, and conclude that network usage and/or charges need to be changed for all ESPs.¹⁷ For example, Pacific Telesis Group erroneously asserts that "ESPs' data communications on a circuit switched network are substantially greater in volume and duration, on average, than the average communications needs of ordinary business customers using the circuit switched network."¹⁸ As demonstrated above, this statement is overly broad. The use of the circuit switched network for alarm services is equal to or

¹⁵ Pacific Telesis Group Comments at 26.

¹⁶ See OPP Internet Paper at 59-60 (discussing the relationship between the length of calls and switch congestion).

¹⁷ E.g., AT&T Comments at 5.

¹⁸ Pacific Telesis Group Comments at 4.

much less than the average voice user's needs. Pacific Telesis Group also makes assertions about Internet usage, and illogically arrives at conclusions about all ESPs.¹⁹ For example, Pacific Telesis Group states that the Commission should recognize the "unique nature of dial-up Internet access . . . and create a special class of service for ESPs."²⁰ Cincinnati Bell Telephone makes the same illogical leap from stating that ISPs cause network congestion to concluding that rates for services provided to all ESPs should be changed.²¹ Whatever the characteristics of dial-up access to the Internet may be, it has nothing to do with the use of the PSTN for alarm services, and neither should the Commission's proposed remedies.

AICC applauds Bell Atlantic/NYNEX's focus on the network usage of ISPs and database ESPs.²² Alarm companies do not fit into either category and do not have the same impact on the PSTN. Bell Atlantic/NYNEX points out the difference between ISPs and pizza delivery services. A pizza delivery service may receive numerous incoming calls but, unlike ISPs, the pizza delivery service's demand is relatively constant.²³ Like pizza delivery services, alarm companies' per-line demand remains relatively

¹⁹ Id. at 7.

²⁰ Id.

²¹ Cincinnati Bell Telephone Comments at 3-9.

²² Bell Atlantic/NYNEX Comments at 2.

²³ Id. Attachment B at 3.

constant. As alarm companies obtain significantly more customers, they also obtain more lines.

In sum, there is no comparison between the usage of the PSTN by alarm companies and the usage of the PSTN by ISPs. The Commission's remedies for any problems allegedly caused by Internet access services should not be imposed on alarm services.

IV. UNLIKE ISPs, ALARM COMPANIES DO NOT PROVIDE ACCESS TO OTHER NETWORKS

AICC objects to the comments which proffered a red herring -- the provision of access to other networks by some ESPs.

For example, AT&T repeatedly refers to "ESP's networks."²⁴ AT&T states that "calls to an ESP are typically routed over the local network to the ESP's node . . . and from there to a distant data center or Internet site. Thus, such calls . . . do not terminate at the ESP's POP, as they would if the ESP were truly a business user."²⁵ AT&T is wrong.

Unlike ISPs, alarm companies do not provide access to other networks. Circuit-switched calls to alarm companies are carried entirely by the PSTN and terminate at the alarm companies. Thus, the LECs and in some cases, IXC's which transmit calls to alarm companies are not providing access to any other networks. The customer's call ends at the alarm company's central station.²⁶

²⁴ E.g., AT&T Comments at 12, 29.

²⁵ Id. at 30.

²⁶ Contra id.

AT&T's overly broad assertions about ESPs therefore should be disregarded.

AT&T also asserts that access charges should be imposed on ESPs because they may eventually provide voice telephony.²⁷ But alarm companies do not have their own networks on which to provide voice telephony. The Commission should disregard AT&T's voice telephony concerns.

When the Commission adopted its access charge rules, the Commission indeed was concerned about ESPs providing access to other networks.²⁸ The Commission was concerned about situations where a service provider (such as an ESP or an entity with a PBX) would receive a call that had been transmitted across state lines via WATS service or a private line, and that service provider would forward the call to a customer in the local exchange area.²⁹ Conversely, the Commission also was concerned about a customer making a local call to the service provider and that call being routed to another state using WATS service or a private line. In both situations, the Commission was concerned that the LEC providing service between the customer and the service provider's location may be providing interstate service but may not be recovering its cost of providing that interstate service.

²⁷ AT&T Comments at 4.

²⁸ Memorandum Opinion and Order (MTS and WATS Market Structure), 97 FCC 2d 682, 711-12 (1983).

²⁹ Id.

While such communications paths may be used by ISPs and some other ESPs, they certainly are not used by alarm companies. Local calls to alarm companies are not transmitted to any interstate network. Thus, the LEC carrying a local call to an alarm company is not providing interstate service. Long distance calls to alarm companies are not transmitted to any local network. The originating and terminating LECs carrying the long distance call are compensated by the corresponding IXC. Thus, where necessary, the LECs already are being compensated for interstate service. No further compensation is needed.

V. **THE IMPOSITION OF ADDITIONAL CHARGES ON ALARM SERVICES WOULD BE CONTRARY TO CONGRESSIONAL POLICY**

While the alarm companies' use of the PSTN does not justify any new policies, rules or charges, Congressional policy also requires the Commission to refrain from proposing such changes. As AICC noted in its Reply Comments, one Congressional goal in adopting the Telecommunications Act of 1996 (1996 Act) was to support the continued vitality of the alarm monitoring services industry.³⁰ In Section 275 of the Communications Act of 1934, as amended, Congress provided a waiting period during which Bell Operating Companies are prohibited from expanding into new alarm monitoring businesses.³¹ As discussed below, Congress' reasons for adopting this alarm monitoring services provision also

³⁰ AICC Reply Comments at 3.

³¹ 47 U.S.C. § 275.

require the Commission to refrain from imposing access charges or any other additional charges on alarm companies.

A. MOST ALARM COMPANIES ARE SMALL BUSINESSES

First, in adopting the 1996 Act, Congress noted the small size of the alarm companies, their contribution to the American economy, and the vibrant competition that exists within the alarm industry. Senator Harkin explained:

. . . I know that most of my Senate colleagues share my belief that small business people are the backbone of both the economic and community life of this country. We know that the small business people in our villages, towns and cities back home help to provide neighborhood stability and pride by being the individuals who can be depended upon to participate in community affairs, and we all know small businesses are where the jobs are created.

Today, in the midst of these great battles among corporate titans like the baby Bells, the major long distance carriers, the large cable television companies and the large broadcasters, this amendment helps the little person. . . .

Now, some of my colleagues might ask why we are doing this. . . .

. . . First of all, the burglar and fire alarm industry is unique. It is the only information service which is competitively available in every community across the Nation. If you want to verify this, I urge you to go back to your offices and check the yellow pages in the phone book for your State. What you will find is that the alarm security services are widely and competitively available.

What is less apparent is that this highly competitive, \$10 billion industry is not dominated by large companies. Instead, it is dominated by small businesses which employ on average less than 10 workers. There are over 13,000 alarm companies across the Nation. The top 100 control less than 25 percent of the marketplace and the 100th largest company has

annual revenues of less than \$3 million a year. The eight largest companies control merely 11 percent of the marketplace.³²

This data demonstrates that more than 99% of the 13,000 alarm companies have revenues of less than \$9 million -- the threshold for the definition of a "small business" under the Standard Industrial Classification (SIC) 7382³³ for "Security Systems Services."³⁴ Thus, more than 99% of the alarm industry qualifies as small businesses under the SBA's definition of small business, and therefore qualify as small businesses under the Regulatory Flexibility Act.³⁵

Senator Harkin further explained:

Many of these businesses epitomize the American dream. Alarm companies are started by people with all kinds of backgrounds. A military veteran who learned electronics in the service, someone who worked in the building trades, or a retired police officer, they start their own businesses; they work hard; they succeed; and they want to pass on their business to their children.

. . . .

Furthermore, no single individual or group of companies has the ability to set the price in the marketplace. It is the American consumer who has the most to lose because the consumer benefits from this competitive marketplace. Over the past decade, the average price of the installation of a home security system has declined 40 percent. Today, you can have a

³² 141 Cong. Rec. S8310, 8355 (June 14, 1995) (statement of Sen. Harkin) (emphasis added).

³³ Standard Industrial Classification Manual, at 368 (1987).

³⁴ 61 Fed. Reg. 3293 (giving \$9 million as SBA's small business definition for SIC 7382).

³⁵ See NPRM paras. 290, 325.

system installed in your home for as little as \$200, and some companies are even offering free installation in order to promote alarm monitoring services.

The alarm industry also has an excellent job creation record. Over the past 20 years, the alarm industry has more than triple employment from 40,000 jobs to well over 140,000 jobs.³⁶

Because telecommunications services are an essential element of alarm service, any significant increase in the cost thereof will have a substantial adverse impact upon thousands of small businesses. Ultimately, the impact would be a decrease in the amount or quality of the public safety services provided by alarm companies.

As noted by IIA:

[R]equiring information service providers to allocate a portion of their resources to access charges as currently defined would be detrimental to most small and emerging information service companies, whose profit margins are extremely narrow. To require them to subsidize other industries or pay inflated costs would threaten their growth by misallocating financial resources that could otherwise be used to invest in new technologies. Such a policy would be inconsistent with the 1996 Act's mandate of promoting competition within the industry by allowing nascent companies to develop and invest in new technologies, thereby providing consumers with modern services at lower costs."³⁷

The Commission should disregard AT&T's references to large, well-known corporations that offer enhanced services.³⁸ AT&T's focus was on ISPs and other on-line service providers, not alarm

³⁶ 141 Cong. Rec. S8310, 8355 (June 14, 1995) (statement of Sen. Harkin) (emphasis added).

³⁷ IIA Comments at 4.

³⁸ AT&T Comments at 11-12.

companies which, as demonstrated above, are small businesses, by any accepted standards.

In sum, the Congressional goals in enacting the 1996 Act included promoting competition and preserving the vitality of the small businesses that comprise the alarm industry. Because the imposition of access charges or other supplemental charges could be detrimental to these small businesses, the Commission should not impose such additional charges on alarm services.

B. ALARM COMPANIES HAVE A NATURAL NEED TO MINIMIZE THEIR USE OF THE SWITCHED TELEPHONE NETWORK

Another reason for the alarm monitoring services provision in the 1996 Act is the need for alarm companies to provide reliable service, as discussed above. Congress recognized this need. Senator Harkin stated:

This is a very vibrant sector of the American economy. So vigorous [that] alarm industry competition benefits the consumer in another way -- the development of an industry-wide culture which promotes prompt, reliable service.

This is vitally important in an industry where the service involved is a protection of life, safety, and property in one's home or business. Knowing that a service person will be there next week sometime in the morning or afternoon is not good enough. Consumers benefit from the knowledge that if they do not like the service they are receiving, there is always another alarm company that will provide the service they want and need at a competitive price.³⁹

As demonstrated above, this need to provide reliable service results in sparing use of the telephone network.

³⁹ 141 Cong. Rec. S8310, 8355 (June 14, 1995) (statement of Sen. Harkin) (emphasis added).

In sum, Congressional policy requires the Commission to preserve the vitality of the alarm industry -- an industry comprised of small businesses that protect life, safety and property.

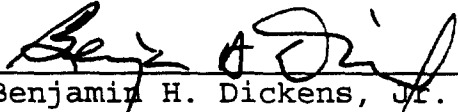
CONCLUSION

For the foregoing reasons, AICC respectfully submits that there is no need to propose rules concerning the use of or charges for PSTN services used for alarm services. Alarm services are not contributing to any network congestion, and alarm companies do not provide access to other networks. Furthermore, alarm companies are small businesses whose vitality should be protected by the Commission.

Respectfully submitted,

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EXHIBIT 1

Table 4-5.3.2.2.3 Loading Capacities for Hunt Groups

System Loading at the Supervising Station	Number of Lines in Hunt Group				
	1	2	3	4	5 to 8
With DACR lines processed in parallel					
Number of initiating circuits	N/A	5000	10,000	20,000	20,000
Number of DACTs ¹	N/A	500	1500	3000	3000
With DACR lines processed serially (put on hold, then answered one at a time)					
Number of initiating circuits	N/A	3000	5000	6000	6000
Number of DACTs ¹	N/A	300	800	1000	1000

N/A: Not acceptable.

¹Table 4-5.3.2.2.3 is based on an average distribution of calls and an average connected time of 30 seconds for a message. The loading figures in the table presume that the lines are in a hunt group (i.e., DACT can access any available line). Note that a single-line DACR is NOT ACCEPTABLE (N/A) for any of the configurations shown.

- (a) Current on each circuit under normal conditions;
- (b) Current on each side of the circuit with the receiving equipment conditioned for an open circuit.

NOTE: The current readings in accordance with 4-5.3.3.1.4(a) should be compared with the normal readings to determine if a change in the circuit condition has occurred. A zero current reading in accordance with 4-5.3.3.1.4(b) indicates that the circuit is clear of a foreign ground.

4-5.3.3.2 Transmission Channels.

4-5.3.3.2.1 Circuits between the protected premises and the supervising or subsidiary station that are essential to the actuation or operation of devices initiating a signal indicative of fire shall be so arranged that the occurrence of a single break or single ground fault does not prevent transmission of an alarm.

Exception No. 1: Circuits wholly within the supervising or subsidiary station.

Exception No. 2: The carrier system portion of circuits.

4-5.3.3.2.2 The occurrence of a single break or a single ground fault on any circuit shall not of itself cause a false signal that could be interpreted as an alarm of fire. Where such single fault prevents the normal functioning of any circuit, its occurrence shall be indicated automatically at the supervising station by a trouble signal compelling attention and readily distinguishable from signals other than those indicative of an abnormal condition of supervised parts of a fire suppression system(s).

4-5.3.3.2.3 The circuits and devices shall be arranged to receive and record a signal readily identifiable as to location of origin, and provisions shall be made for equally identifiable transmission to the public fire service communications center.

4-5.3.3.2.4 Multipoint transmission channels between the protected premises and the supervising or subsidiary station and within the protected premises, consisting of one or more coded transmitters and an associated system unit(s), shall meet the requirements of either 4-5.3.3.2.5 or 4-5.3.3.2.6.

4-5.3.3.2.5 Where end-to-end metallic continuity is present, proper signals shall be received from other points under any one of the following transmission channel fault conditions at one point on the line:

- (a) Open; or
- (b) Ground; or
- (c)* Wire-to-wire short; or
- (d) Open and ground.

4-5.3.3.2.6 Where end-to-end metallic continuity is not present, the nonmetallic portion of transmission channels shall meet all of the following requirements:

(a) Two nonmetallic channels or one channel plus a means for immediate transfer to a standby channel shall be provided for each transmission channel, with a maximum of eight transmission channels being associated with each standby channel, or shall be provided over one channel, provided that service is limited to one plant.

(b) The two nonmetallic channels (or one channel with standby arrangement) for each transmission channel shall be provided by one of the following means, shown in descending order of preference:

- 1. Over separate facilities and separate routes; or
- 2. Over separate facilities in the same route; or
- 3. Over the same facilities in the same route.

(c) Failure of a nonmetallic channel or any portion thereof shall be indicated immediately and automatically in the supervising station.

(d) Proper signals shall be received from other points under any one of the following fault conditions at one point on the metallic portion of the transmission channel:

- 1. Open; or
- 2. Ground; or
- 3.* Wire-to-wire short.

4-5.3.3.3 Loading Capacity of McCulloh Circuits.

4-5.3.3.3.1 The number of transmitters connected to any transmission channel shall be limited to avoid interference. The total number of code wheels or equivalent connected to a single transmission channel shall not exceed 250. Alarm signal transmission channels shall be reserved exclusively for fire alarm signal transmitting service.

Exception: As provided in 4-5.3.3.3.4

4-5.3.3.3.2 The number of waterflow switches permitted to be connected to actuate a single transmitter shall not exceed five switches.